Doc Code: AP.PRE.REQ

PTQ/SB/33 (07-09) Doc Code: AP.PRE.REQ

Approved for use through 07/31/22/2 0/169 0851-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMENT

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMENT

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information undersit of stighting a valid Office of stighting as with Office of the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information undersit of stighting as valid Office.

Under the Paperwork Reduction Act of 1995, no persons are required to respon		Docket Number (	Optional)	
PRE-APPEAL BRIEF REQUEST FOR REVIEW		IWI-16117		
hereby certify that this correspondence is being deposited with the	Application N	lumber	Filed	
Inited States Postal Service with sufficient postage as first class mail n an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria. VA 22313-1450" [37 CFR 1.8(a)]	10/541,772		July 8, 2005	
on	First Named Inventor			
ignature	Hideo Hata et al.			
orginution	Art Unit Exa		Examiner	
yped or printed ame	1616		Ali Soroush	
Applicant requests review of the final rejection in the above with this request.  This request is being filed with a notice of appeal.	Taginang ap		•	
Note: No more than five (5) pages may be provide				
applicant/inventor		/Mark E. Bandy/		
	Signature			
assignee of record of the entire interest.  See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.		Mark E. Bandy Typed or printed name		
(Form PTO/SB/96)  attorney or agent of record.  35788		(216) 566-9700		
Registration number 35788	Telephone number			
attorney or agent acting under 37 CFR 1.34.		March 10, 2010		
Registration number if acting under 37 CFR 1.34	_		Date	
NOTE Signatures of all the inventors or assignees of record of the entit Submit multiple forms if more than one signature is required, see below	re interest or the	eir representative(s	s) are required.	
"Total of forms are submitted.				

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to five into the recommendation of the property of the property

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 10/541772 Confirmation No. 1465

Applicant : Hideo Hata et al. Filed : July 8, 2005 TC/A U : 1616

Examiner : Ali Soroush
Title : Water-Swellable Clay Mineral Laminated Powder, Dye-

Water-Swellable Clay Mineral Complex And Composition

Containing The Same

Docket No. : IWI-16117 Customer No. : 007609

## PRE-APPEAL BRIEF REQUEST FOR REVIEW

(In response to Paper No./Mail Date 20091205)

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir/Madam:

Applicant hereby presents this Pre-Appeal Brief Request for Review in the above captioned application. A Notice of Appeal is filed concurrently herewith.

In the Office Action mailed December 10, 2009, the Examiner maintained the rejection of claims 1-39 under 35 USC §103(a) for alleged obviousness based upon JP 358124713 to Mizumaki et al. (Japanese Patent 358124713) in view of van Duffel et al., and further in view of US 2003/0163877 to Baker et al.

In accompanying Amendment C, Applicant cancelled claims 1-31, without prejudice, and reserved its right to pursue prosecution of those claims.

Remaining pending claims 32-39 are re-presented for consideration again in light of the Pre-Appeal Brief Request for Review and accompanying Notice of Appeal.

## A. The Pending Claims

Claim 32 is directed to an acid dye laminated pigment, in which a dye/water-swellable clay mineral complex having an opposite charge to the charge of a base powder, is coated on the surface of the base powder, and a polybase and an acid dye are intercalated in between the layers of the water-swellable clay mineral of the dye/water-swellable clay mineral complex. Dependent claims 33-36 recite various aspects of the pigment of claim 32. Dependent claim 38 recites a pigment composition that includes the acid dye laminated pigment of claim 32. And dependent claim 39 recites a cosmetic that includes the acid dye laminated pigment of claim 32.

Claim 37 recites a method of producing an acid dye laminated pigment comprising an acid dye/water-swelling clay mineral complex producing process for an acid dye intercalated in between the layers of the water-swellable clay mineral. In this method, a polybase and an acid dye are contacted with a water-swellable clay mineral in aqueous phase. The method also comprises a laminating process for the acid dye/water-swelling clay mineral complex electrostatically adsorbed on the surface of a base powder. The obtained acid dye/water-swelling clay mineral complex and a base powder, having an opposite charge to the charge of the complex, are mixed in aqueous phase.

B. Rejection of Claims Under §103 Based Upon Mizumaki et al. in View of Van Duffel et al. and Baker et al. is Clearly Erroneous and Must be Withdrawn

The pending claims 32-39 all relate to a dye/water-swellable clay mineral complex which is significantly different than laminated powder. However, the Examiner

Application No. 10/541772 Pre-Appeal Brief Request for Review dated March 10, 2010

did not mention the dye/clay mineral complex in the latest Office Action. Instead, the Examiner referred to the laminated powder. Specifically, it is respectfully submitted that the Examiner did not appreciate the subject matter of claims 32-39. In the most recent Office Action, the Examiner asserted:

Applicant claims a water-swellable clay mineral laminted powder, in which a layer of ionic molecule having two or more ionic functional group is laminated on the surface of a base powder particle; a layer of water-swellable clay mineral is laminated thereon.

Page 3 of Office Action mailed December 10, 2009.

It is believed that the Examiner was referring to the subject matter of previously presented claims 1-18. Those claims are directed to a laminated powder. That laminated powder is laminated water-swellable clay and an ionic molecule (including polybase). That laminated powder is distinguishable from the subject matter of claims 32-39 relating to an acid dye laminated pigment that comprises a polybase between layers of water-swellable clay (referred to as "intercalation"). In the laminated powder of claims 1-18, the ionic molecule is not intercalated in water-swellable clay. This significant difference was noted in Applicant's previous Amendment B. However, this was not addressed in the most recent Office Action. For at least this reason, a prima facie rejection of claims 32-39 has not been made, and therefore, the present rejection must be withdrawn.

Furthermore, the prior art completely fails to teach or describe the claimed complexes and in particular, the intercalation aspect recited in all claims 32-39. Van Duffel et al. disclose a film formed by laminating an ionic molecule (PDDA) and water-swellable clay mineral onto "mica". A close reading of the article to van Duffel reveals that "mica" refers to a "mica slide" as described in the experimental section of the

article to van Duffel. The "mica slide" is a typical substrate used in AFM imaging. Van Duffel used the "mica slide" merely for AFM imaging, see for example that their article is entitled "Multilayered Clay Films: <a href="Atomic Force Microscopy">Atomic Force Microscopy</a> Study and Modeling."

(Emphasis added). The "mica slide" is a plate having a dimension in the range of centimeters or millimeters, and thus the "mica" is not powder. This article is not relevant to the pending claims.

In the JP '713 reference, Mizumaki used "mica powder" as a component of colored aerosol for a hair coloring agent. A person skilled in the relevant art and interested in devising an acid dye laminated pigment by a particular film forming technique, would not be motivated to use a "mica slide" as disclosed by van Duffel in a hair coloring agent as described by Mizumaki. These two teachings are from vastly different fields of art.

Nor would the skilled person be motivated to coat a clay mineral onto the mica powder of Mizumaki even in view of the teaching by Baker et al. in the US '877 publication. Baker teaches a hair coloring composition which contains a water-swellable clay mineral and a coloring agent. It appears that the clay mineral and the coloring agent are attached to each other by their charge interaction. Baker teaches that the hair coloring composition has good color delivery to hair and reduced coloration of the skin. However, if a person skilled in this field of art intended to combine Mizumaki and Baker, then he or she would blend the mica and the clay mineral-coloring agent complex separately into composition. There is no suggestion to coat the clay mineral complex onto the base powder, as called for in the pending claims.

Application No. 10/541772 Pre-Appeal Brief Request for Review

dated March 10, 2010

Specifically, the art fails to teach an acid dye laminated pigment in which a

dye/water-swellable clay mineral complex is coated on the surface of a base powder

wherein a polybase is intercalated in between the layers of the water-swellable clay

mineral of the complex.

For at least these reasons, it is respectfully submitted that all claims 32-39 are

patentable over the cited references.

C. Conclusion

If there are any fees resulting from this communication, please charge same to

our Deposit Account No. 18-0160, our Order No. IWI-16117.

Respectfully submitted,

RANKIN, HILL & CLARK LLP

By /Mark E. Bandy/

Mark E. Bandy, Reg. No. 35788

38210 Glenn Avenue Willoughby, Ohio 44094-7808

(216) 566-9700

5 of 5